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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,417	07/18/2003	Sachin Navin Chheda	200308578-1	4994

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

DU, THUAN N

ART UNIT	PAPER NUMBER
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2116

NOTIFICATION DATE	DELIVERY MODE
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09/22/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/623,417	Applicant(s) CHHEDA ET AL.	
	Examiner Thuan N. Du	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-17 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,5-16,22 and 23 is/are allowed.
- 6) ☒ Claim(s) 17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment (dated 6/15/2009).
2. Claims 4 and 18 have been canceled. Claims 1-3, 5-17 and 19-23 are presented for examination.

Claim Rejections - 35 USC § 103

3. Claims 17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somers et al. [Somers], U.S. Patent No. 6,718,474 in view of Primm et al. [Primm], U.S. Patent No. 7,159,022.
4. As per claim 17, Somers teaches a method for efficient temperature management of a plurality of computers (CPUs 100), the method comprising:
 - monitoring temperature at each computer (CPU 100) in the system [col. 3, lines 17-22, 43-50; col. 4, lines 4-7];
 - receiving polling messages at each computer (CPU 100) in the system [col. 4, lines 8-10, 26-27; col. 6, lines 22-23];
 - responding to the polling messages by transmitting a temperature value from each computer (CPU 100) in the system to a single centralized power manager (SMM 300) [col. 3, lines 17-22, 30-36, 46-50; col. 4, lines 8-10, 26-27; col. 6, lines 22-24]; and

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receiving messages from the single centralized power manager (SMM 300) which instruct each computer (CPU 100) when power management action is to be applied [col. 4, lines 11-17, 27-29; col. 5, lines 3-13; col. 6, lines 24-31].

Somers does not explicitly teach that the power management action is applying thermoelectric cooling to the affected computer. However, Somers discloses that thermoelectric cooler is widely known used to dissipate heat [col. 1, lines 18-23]. Therefore, one of ordinary skill in the art would have recognized that the thermoelectric cooler could be used in placed of or in combination with the clock throttling technique taught by Somers.

Somers does not explicitly teach that the system is a rack of computers. Primm discloses a system for monitor temperature for a plurality of computers (network appliances) where the computers could be placed in a rack [col. 7, lines 20-26]. It would have been obvious to one of ordinary skill in the art at time of the invention to recognize that the teachings of Somers could be applicable to monitor temperature of a plurality of computers placed in a rack, as taught by Primm, without departing from the scope and spirit of the teachings.

5. As per claim 19, Primm teaches that the rack of computers comprises a rack of servers [col. 7, lines 20-21].

6. As per claim 20, Somers teaches a centralized method for efficient temperature management of a plurality of computers (CPUs 100), the method comprising:

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transmitting polling messages to local monitoring circuitry (thermal sensor 120) at each of the computers (CPUs 100) in the system [col. 4, lines 8-10, 26-27; col. 6, lines 22-23];

receiving responses to the polling messages from the local monitoring circuitry at each of the computers (CPUs 100) in the system [col. 4, lines 8-10, 26-27], wherein the responses include temperature values [col. 3, lines 19-22; col. 6, lines 22-26];

determining at which computers to apply power management action [col. 5, lines 3-13; col. 6, lines 24-31]; and

transmitting messages to said determined computers to apply said power management action [col. 4, lines 12-17; col. 6, lines 33-34].

Somers does not explicitly teach that the power management action is applying thermoelectric cooling to the affected computer. However, Somers discloses that thermoelectric cooler is widely known used to dissipate heat [col. 1, lines 18-23]. Therefore, one of ordinary skill in the art would have recognized that the thermoelectric cooler could be used in placed of or in combination with the clock throttling technique taught by Somers.

Somers does not explicitly teach that the system is a rack of computers. Primm discloses a system for monitor temperature for a plurality of computers (network appliances) where the computers could be placed in a rack [col. 7, lines 20-26]. It would have been obvious to one of ordinary skill in the art at time of the invention to recognize that the teachings of Somers could be applicable to monitor temperature of a

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plurality of computers placed in a rack, as taught by Primm, without departing from the scope and spirit of the teachings.

7. As per claim 21, Primm teaches that the rack of computers comprises a rack of servers [col. 7, lines 20-21].

Response to Arguments

8. Applicant's arguments filed 6/15/2009 have been considered but they are not persuasive.

9. In previous action, examiner typographically indicated claims 17 and 19-22 are rejected. The correct rejected claims should be 17 and 19-21.

10. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teachings of Somers could be applied in the rack of computers as taught by Primm without departing from the scope and spirit of the invention.

Allowable Subject Matter

11. Claims 1-3, 5-16 and 22-23 are allowed.

Conclusion

12. Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the Applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. In preparing responses, it is respectfully requested that the Applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. Also, any prior art made of record and not relied upon is also considered pertinent to Applicant's disclosure.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan Du whose telephone number is (571) 272-3673.

The examiner can normally be reached on Monday-Friday: 7:30 am - 4:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached at (571) 272-3667.

Central TC telephone number is (571) 272-2100.

The fax number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

TD
September 15, 2009

/Thuan N. Du/
Primary Examiner, Art Unit 2116